AB-3185
Third Year B. Sc. (Sem. V) Examination
March/April – 2015
Electronics : Paper - VII
(Analog Communication)

Time : 2 Hours] [Total Marks : 50

Instruction :

(1) Fill up strictly the details of ☐ signs on your answer book.

Name of the Examination :
THIRD YEAR B. SC. (SEM. V)

Name of the Subject :
ELECTRONICS : PAPER - VII

Subject Code No. : 3 1 8 5 ☐ Section No. (1, 2,.....) : NII

Seat No. : Student's Signature

(2) Figure .on the right indicates full marks.
(3) All symbols and abbreviations have their usual meaning.
(4) Non-programmable calculators are allowed.
(5) Q.I is compulsory.
(6) Assume data if necessary.

1 Answer in short 8
(a) Define " Modulation"
(b) Why we need detection in communication?
(c) Write the advantages and disadvantages of AM
(d) Write the full name of SSB, DSB, PM , FM

2 (a) What is noise? Explain various types of external noise. 8
(b) Explain basic principle of an antenna. 6

OR

(a) Discuss characteristic impedance of a transmission 8
  line and explain the methods of its calculation.
(b) Explain sky wave propagation in detail. 6

AB-3185] 1 [Contd...
3  (a) Derive the relation between the output power of an AM transmitter and the depth of modulation
(b) What is SSB? Briefly explain it.
(c) A 400 W carrier is modulated to depth of 75%, calculate the total power in the modulated wave.

OR

3  (a) How to suppress the unwanted side band? Explain any one technique in detail.
(b) Explain working of a Balance modulator.

4  Write short notes on any two:
(a) Internal Noise
(b) Losses in transmission line
(c) Radiation pattern of an antenna
(d) DSB Suppressed carrier modulation